

## Defining CoS Schedulers (J-Web Procedure)

Using schedulers, you can assign attributes to queues and thereby provide congestion control for a particular class of traffic. These attributes include the amount of interface bandwidth, memory buffer size, transmit rate, and schedule priority.

To configure schedulers using the Configuration pages:

1. Create a scheduler and specify attributes for it. For a description of scheduler-related fields, see Table 1.
2. Associate the scheduler to a forwarding class. Because the forwarding class is assigned to a queue number, the queue inherits this scheduler's attributes. For a description of scheduler map-related fields, see Table 1.

**Table 1: Schedulers Configuration Page Summary**

Field	Function	Your Action
<b>Scheduler Summary</b>		
Scheduler Name	Displays the names of defined schedulers.  Allows you to edit a specific scheduler.	To edit a scheduler, click its name.
Scheduler Information	Displays a summary of defined settings for a scheduler, such as bandwidth, delay buffer size, and transmit rates.	None.
Add	Opens a page that allows you to add a scheduler.	Click <b>Add</b> .
Delete	Removes a scheduler.	Click <b>Delete</b> .
<b>Add a Scheduler/Edit Scheduler</b>		
Scheduler Name	Specifies the name for a scheduler.	To name a scheduler, type the name—for example, <b>be-scheduler</b> .

**Table 1: Schedulers Configuration Page Summary** (continued)

Field	Function	Your Action
Buffer Size	<p>Defines the size of the delay buffer.</p> <p>By default, queues 0 through 7 have the following percentage of the total available buffer space:</p> <ul style="list-style-type: none"> <li>■ Queue 0—95 percent</li> <li>■ Queue 1—0 percent</li> <li>■ Queue 2—0 percent</li> <li>■ Queue 3—0 percent</li> <li>■ Queue 4—0 percent</li> <li>■ Queue 5—0 percent</li> <li>■ Queue 6—0 percent</li> <li>■ Queue 7—5 percent</li> </ul> <p><b>NOTE:</b> A large buffer size value correlates with a greater possibility of packet delays. This might not be practical for sensitive traffic such as voice or video.</p>	<p>To define a delay buffer size for a scheduler, select the appropriate option:</p> <ul style="list-style-type: none"> <li>■ To specify no buffer size, select <b>Unconfigured</b>.</li> <li>■ To specify buffer size as a percentage of the total buffer, select <b>Percent</b> and type an integer from 1 through 100.</li> <li>■ To specify buffer size as the remaining available buffer, select <b>Remainder</b>.</li> </ul>
Scheduling Priority	<p>Sets the transmission priority of the scheduler, which determines the order in which an output interface transmits traffic from the queues.</p> <p>You can set scheduling priority at different levels in an order of increasing priority from low to high.</p> <p>A high-priority queue with a high transmission rate might lock out lower-priority traffic.</p>	<p>To specify a priority, select one:</p> <ul style="list-style-type: none"> <li>■ <b>low</b>—Packets in this queue are transmitted last.</li> <li>■ <b>strict—high</b>—Packets in this queue are transmitted first.</li> </ul>
Transmit Rate	<p>Defines the transmission rate of a scheduler.</p> <p>The transmit rate determines the traffic bandwidth from each forwarding class you configure.</p> <p>By default, queues 0 through 7 have the following percentage of transmission capacity:</p> <ul style="list-style-type: none"> <li>■ Queue 0—95 percent</li> <li>■ Queue 1—0 percent</li> <li>■ Queue 2—0 percent</li> <li>■ Queue 3—5 percent</li> <li>■ Queue 4—0 percent</li> <li>■ Queue 6—0 percent</li> <li>■ Queue 7—5 percent</li> </ul>	<p>To define a transmit rate, select the appropriate option:</p> <ul style="list-style-type: none"> <li>■ To not specify transmit rate, select <b>Unconfigured</b>.</li> <li>■ To specify the remaining transmission capacity, select <b>Remainder Available</b>.</li> <li>■ To specify a percentage of transmission capacity, select <b>Percent</b> and type an integer from 1 through 100.</li> </ul> <p>To enforce the exact transmission rate or percentage you configured, select the <b>Exact Transmit Rate</b> check box.</p>

**Table 2: Scheduler Maps Configuration Page Summary**

Field	Function	Your Action
<b>Scheduler Maps Summary</b>		
Scheduler Map Name	Displays the names of defined scheduler maps. Scheduler maps link schedulers to forwarding classes.  Allows you to edit a scheduler map.	To edit a scheduler map, click its name.
Scheduler Map Information	For each map, displays the schedulers and the forwarding classes that they are assigned to.	None.
Add	Opens a page that allows you to add a scheduler map.	Click <b>Add</b> .
Delete	Removes a scheduler map.	Select it and click <b>Delete</b> .
<b>Add a Scheduler Map/Edit Scheduler Map</b>		
Scheduler Map Name	Specifies the name for a scheduler map.	To name a map, type the name—for example, <b>be-scheduler-map</b> .
Scheduler Mapping	Allows you to associate a preconfigured scheduler with a forwarding class.  After scheduler maps have been applied to an interface, they affect the hardware queues, packet schedulers.	To associate a scheduler with a forwarding class, locate the forwarding class and select the scheduler in the box next to it.
<b>Related Topics</b>	<ul style="list-style-type: none"><li>■ Defining CoS Schedulers (CLI Procedure)</li><li>■ Example: Configuring CoS on EX Series Switches</li><li>■ Monitoring CoS Scheduler Maps</li></ul>	

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Published: 2009-07-22